I CLAIM:

1. In a communications network deploying a first cache between a user and a server, the improvement comprising:

    the utilization of a second cache to aggregate user requests and responses according to a protocol between said first cache and an application server.

2. The improvement of Claim 1, including a proxy module for checking whether a user request is already stored within said separate cache.

3. The improvement of Claim 1 employing a protocol between said user and server selected of any one of the group of HTTP, RTSP, FTP, LDAP, SNMP and WAP.

4. The improvement of Claim 1 in an Internet Service Provider Network employing a second cache to aggregate requests and responses according to an Internet Content Adaptation Protocol (ICAP), including means for transforming deployed non-ICAP-enabled caches to an ICAP-enabled cache format.

5. The improvement of Claim 4 wherein said means includes an HTTP adapter.

6. The improvement of Claim 4, including means for transforming streaming caches to an ICAP-enabled streaming cache format.

7. The improvement of Claim 4 wherein said means includes an RTSP adapter.

8. The improvement of Claim 4, including means for transforming deployed WAP caches to an ICAP-enabled WAP cache format.

9. The improvement of Claim 8 wherein said means includes a WAP adapter.

10. The improvement of Claim 4, including means for transforming a non-ICAP-enabled application server to an ICAP-enabled application server.

11. The improvement of Claim 1, including a rule engine with an open interface for allowing third-party insertion of rules governing responses to user requests.

12. The improvement of Claim 11 wherein said rule engine allows dynamic insertion of rules based on the then desires of application servers to the Internet.

1   13. The improvement of Claim 11, including means for
2   tracking individual user access patterns to the Internet.

1   14. The improvement of Claim 13 wherein said means also
2   allows dynamic insertion of rules based on such access patterns
3   of said user to provide profile-based services thereto.

1   15. The improvement of Claim 13, including a database of
2   information to provide location-based services to said user.

1   16. The improvement of Claim 4, also including means for
2   transforming deployed streaming caches to an ICAP-enabled
3   streaming cache format, and means for transforming deployed WAP
4   caches to an ICAP-enabled WAP cache format.

1   17. The improvement of Claim 4, including means for
2   transforming deployed non-ICAP enabled caches to an ICAP-enabled
3   cache format, means for transforming deployed streaming caches
4   to an ICAP-enabled streaming cache format, and means for
5   transforming deployed WAP caches to an ICAP-enabled WAP cache
6   format.

1   18. The improvement of Claim 4, including a rule engine
2   with an open interface for allowing third-party insertion of
3   rules governing responses to user requests.

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1   19. The improvement of Claim 1, including an Application

2   Programming Interface (API) for third-party writing of

3   applications for the network.